

second specimen has veins 6 and 7 of hindwings separate; in the original type they are unmistakably stalked, but it now appears probable that this was an individual abnormality, and the presence of a costal fold (a discordant character in *Cnephasia*) and the specific affinity to *fervida* indicate that the species should be removed to *Tortrix*. After careful comparison with my seven specimens of *fervida*, however, I entertain no doubt that the two species are distinct; apart from superficial colouring, in which there is certainly some variability, the ciliations of antennae in ♂ are obviously longer and more fasciculate in *fervida*, and the termen of forewings in that species is distinctly less oblique than in *sphenias*.

#### OECOPHORIDAE.

##### *Borkhausenia compsogramma* n. sp.

♂. 13–15 mm. Head, thorax, and abdomen dark purplish-fuscous. Antennal ciliations 1. Palpi grey, second joint sometimes partially suffused with whitish-yellowish. Forewings elongate, costa gently arched, apex obtuse, termen obliquely rounded; dark violet-fuscous; markings ochreous-yellow suffused in disc with fulvous-orange, and with some scattered blackish scales on their edges; an oval blotch extending over basal fourth of dorsum; a narrow irregular rather oblique fascia from costa before  $\frac{1}{3}$ , not reaching dorsum; a transverse fasciate blotch from costa beyond middle, and another inwardly oblique from costa at  $\frac{4}{5}$ , both directed towards but not reaching a spot on dorsum before tornus; a streak along termen throughout: cilia fuscous, base scaled with ochreous-yellow along terminal streak. Hindwings and cilia dark grey.

Buller River, in December (Hudson); two specimens. At first sight extremely like *chrysogramma*, but on comparison the markings are seen to be quite differently arranged.

##### *Izatha amorbas* Meyr.

This species has an elongate pale-yellow blotch extending beneath median third of costa of hindwings, sometimes nearly obsolete, and not noticed in my description, but in an example now sent from Dunedin it is conspicuous.

#### LYONETIADAE.

##### *Hectacma crypsimima* n. sp.

♂. 10 mm. Head grey mixed with whitish and blackish. Palpi dark fuscous. Thorax dark fuscous slightly speckled with whitish. Abdomen dark fuscous. Forewings elongate, rather narrow, costa gently arched, apex tolerably pointed, termen hardly rounded, extremely oblique; bronzy-brown, irregularly speckled with whitish except in posterior part of disc, with some scattered blackish scales; a very oblique blackish wedge-shaped streak from basal part of costa reaching half across wing; oblique blackish wedge-shaped spots from costa before middle and towards apex, and one from middle of dorsum; a small round blackish apical spot: cilia grey, whitish-tinged round apex, with two blackish lines. Hindwings and cilia dark fuscous.

Wellington, in February (Hudson); one specimen, "taken on black *Fagus* trunks."

## TINEIDAE.

*Mallobathra perisseuta* n. sp.

♂. 15 mm. Head, palpi, thorax, and abdomen dark fuscous. Antennal ciliations  $2\frac{1}{2}$ . Forewings elongate, posteriorly slightly dilated, costa gently arched, apex obtuse, termen obliquely rounded; 6 present; fuscous, anterior half of costa suffused with darker fuscous; a dark-fuscous quadrate spot on middle of dorsum, preceded and followed by suffused whitish blotches: cilia fuscous. Hindwings with 6 present; rather dark fuscous: cilia fuscous. Dunedin, in October (Clarke); one specimen.

ART. VIII.—*Illustrated Life-histories of New Zealand Insects: No. 1.*

By G. V. HUDSON, F.E.S., F.N.Z.Inst.

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Plate I.

THE present article is the first of a series I hope to publish from time to time on the life-histories of New Zealand insects, which to the best of my belief have not previously been recorded. The subjects will not be selected in any systematic order, but the life-histories will simply appear as they are worked out in the field. Preference will, however, be given to those orders of insects where the least is known regarding their habits, and the species dealt with will therefore mainly belong to the so-called "neglected orders." Hence species belonging to the better-known orders of Lepidoptera and Coleoptera will be excluded from the scope of these papers at present. Illustrations will be given with each paper, which it is hoped will enable any naturalist to recognize the insects in all their stages. Such structural descriptions as may be given will be extremely brief, as it will necessarily devolve on specialists in each order to give fuller details when the study of the "neglected orders" is taken up in real earnest. In the meantime the present notes and illustrations may be useful in arousing interest and in presenting the subject in an intelligible form to the general student of nature.

Order DIPTERA.

Family TIPULIDAE.

*Gnophomyia rufa*. (Plate I, fig. 7. ♂.)

*Tipula rufa* Huds., *Trans. N.Z. Inst.*, vol. 27, p. 294. *Gnophomyia rufa* Hutton, *ib.*, vol. 32, p. 39.

This large and very handsome species of crane-fly, or "daddy-long-legs," may be found occasionally in dense forests in the Wellington and Nelson districts. It is very possibly a generally distributed species, but precise